



The Mitch Report

A newsletter for the Post-Hurricane Reconstruction Project



Costa Rica . Dominican Republic . El Salvador . Guatemala . Haiti . Honduras . Nicaragua

News Flash

With the collaboration of the Ministries of Health of Haiti and the Dominican Republic and in coordination with PAHO and USAID, the three Haitian FETP trainees traveled to the Dominican Republic this past February to begin their field epidemiology training under the guidance of the CDC consultant there. The trainees produced protocols for three surveillance projects and will work on common health problems between the two countries. Subsequent trips to the Dominican Republic by the trainees are planned.

In Nicaragua, a case control study of chronic renal failure among sugarcane workers conducted by the FETP trainees has identified consumption of raw rum (following heavy physical labor) as the principal risk factor. Additional investigations of the rum-making process and possible contaminants are being planned.

From February 20 to March 23, Dr. Carmen Sanchez-Vargas was temporarily acting as the CDC consultant in Nicaragua. While there, she introduced a number of changes including a weekly review of surveillance data and increased field activity to improve the productivity of the Nicaraguan trainees.

Dr. Gloria Suarez, our consultant in El Salvador, is currently working with a trainee on the cluster of deaths (twenty-five or more) in horses and other equines. The initial working diagnosis suspects Venezuelan equine encephalitis as the cause of those deaths.

In addition, Thirty-four Ministry of Health staff in El Salvador successfully completed CDC's "Principles of Epidemiology" course. A diploma ceremony recognizing this achievement was conducted on March 21, 2002.

Trainees in Costa Rica have completed an investigation of over 3000 diarrhea cases in a coffee growing area. It is suspected that the organism (*Shigella*) was introduced to the area by migrant workers, which was then spread to the local resident communities through poorly maintained rural water systems; and thereafter further propagated by contact within families.

Twenty-three staff from the Haitian Ministry of Health including three Haitian FETP trainees attended the second workshop of the Field Epidemiology Training course held in Haiti from April 2 to April 12. During the workshop, participants reviewed basic epidemiological principles through lectures and case studies, and learned about public health communication strategies and principles. All course participants also completed their individual epidemiological projects that they were asked to do and start after the first workshop in November 2001. Participants' projects covered a wide variety of public health topics, from the status of HIV/AIDS at a local hospital to the importance of laboratory during an epidemiologic investigation. As part of the project, participants had to collect data, analyze and/or review the data collected, write a report, and prepare a presentation. Six nurses from the Haitian Extended Program in Immunization also participated in the workshop in order to learn more about epidemiology.

Trainee Investigation

Diarrhea outbreak secondary to salmonella enteritidis during a wedding party, Alajuela, Costa Rica. (Dr. Maria de la Paz Barbosa Argüello)

Background: An outbreak of diarrhea was reported in the community of Guácimo, Alajuela, in November 2001. All the cases assisted to a wedding party, all the assistants ate the same menu and 85% (170/200) of them got sick, 90% (152/170) required medical care, generating an important impact in the community.

Methods: A case control study was conducted using a precoded questionnaire. A total of 94 people fulfilled the case definition (diarrhea, vomiting and fever among assistants to the marriage during the four days after the party) and 14 controls were identified as the only interviewers who did not present symptoms. A score of the severity of the disease was defined by assigning a value to each of the symptoms, and to the duration of the incubation period. The day after the outbreak, it was requested to cultivate a portion of the main dish. Coproculture was done to some of the people who presented diarrhea.

Results: The frequency of signs and symptoms were: diarrhea 89/94, abdominal pain 87/94, fever 80/94, nausea 65/94, vomit 61/94. The ingested foods were: 1) rice with chicken, pork meat and bologna sausage; 2) Lettuce salad, 3) Horchata (milk, cinnamon, and water rice) 4) Cake. All the interviewed ate rice with meats, which made it necessary to determine the association of the disease between the cases who ate < 1 plate (reference level) and those who ate 1 or more plates (OR= 6.67 IC= 1.21-40). When using 3 levels of ingested food, the OR rose to 9.5 (IC95% 0.9-237.2) in cases who ate 1 plate and OR= 5.25 (IC95% 0.75-45.35) in those who ate > 1 plate (chi square for trend=4.32 p<0.05). A positive association between the severity of disease (mild, moderate and severe) and the 3 levels of food ingestion (chi square for trend=21.79 p<0.05) was found. Salmonella enteritidis was isolated in the main food and in the samples of feces cultures.

Conclusions/Intervention: The direct relation, proportional between the quantity of ingested rice and the severity of the disease, supported with the isolation of salmonella enteritidis in the food established that rice with meat was the only responsible for the outbreak. In outbreaks with a high rate of attack and high exposure, the analysis of severity and dose-response is of greater support to link disease with exposures.

Note: The following abstract accepted to the second TEPHINET conference in Madrid, Spain, shows how a trainee in Costa Rica handled a difficult epidemiologic issue -- what do you do when everyone is exposed and there is a high attack rate too? She used a dose-response for the food and a severity of illness score for the outcome to show increasing severity of illness with increasing amount eaten of the suspected food.

Calendar of Events for 2002*

April 15-26	2 nd FETP Module for 2 nd Cohort (location: Honduras)
April 29-May 10	4 th FETP Module for 1 st Cohort (location: El Salvador)
June 2-7	Second TEPHINET International Scientific Conference (location: Madrid, Spain)

*All dates are subject to change

Congratulations!

The Post-Hurricane Reconstruction Project would like to congratulate the following FETP trainees for their abstracts being accepted to the Second TEPHINET International Scientific Conference that will be held in Madrid, Spain, June 2-7, 2002.

Dr. Maria de la Paz Barbosa Argüello / Dr. Elizabeth Saenz / Dr. Xiomara Badilla
(Costa Rica)

Dr. Raquel Pimentel Méndez (Dominican Republic)

Dr. Tomiris Estepan (Dominican Republic)

Dr. Roberto Flores (El Salvador)

Dr. Katia St.Vil (Haiti)

Dr. Carlos Alonso (Nicaragua)

Note: Additional FETP trainees may be accepted to present at the conference as "Latebreakers".



Participants of the second workshop of the Field Epidemiology Training course in Haiti
(April 2-12, 2002)